

Class **Anthozoa** Ehrenberg, 1834¹ (2 subclasses)²
 Subclass **Hexacorallia** Haeckel, 1866 (6 orders)
 Order **Actiniaria** Hertwig, 1882 (3 suborders)³
 Suborder **Endocoelanthae** Carlgren, 1925 (2 families)
 Family **Actinernidae** Stephenson, 1922 (4 genera, 7 species)
 Family **Halcuriidae** Carlgren, 1918 (2 genera, 10 species)
 Suborder **Nynantheae** Carlgren, 1899 (3 infraorders)
 Infraorder **Boloceroidaria** Carlgren, 1924 (2 families)
 Family **Boloceroididae** Carlgren, 1924 (3 genera, 9 species)
 Family **Nevadneidae** Carlgren, 1925 (1 genus, 1 species)
 Infraorder **Thenaria** Carlgren, 1899
 Acontiaria (14 families)
 Family **Acontiophoridae** Carlgren, 1938 (3 genera, 5 species)
 Family **Aiptasiidae** Carlgren, 1924 (6 genera, 26 species)
 Family **Aiptasiomorphidae** Carlgren, 1949 (1 genus, 4 species)
 Family **Antipodactinidae** Rodríguez, López-González, & Daly, 2009 (1 genus, 2 species)⁴
 Family **Bathypheiliidae** Carlgren, 1932 (5 genera, 9 species)
 Family **Diadumenidae** Stephenson, 1920 (1 genus, 9 species)
 Family **Haliplanellidae** Hand, 1956 (1 genus, 1 species)⁵
 Family **Hormathiidae** Carlgren, 1932 (20 genera, 131 species)
 Family **Isophelliidae** Stephenson, 1935 (7 genera, 46 species)
 Family **Kadosactinidae** Riemann-Zürneck, 1991 (2 genera, 6 species)
 Family **Metridiidae** Carlgren, 1893 (2 genera, 7 species)
 Family **Nemanthidae** Carlgren, 1940 (1 genus, 3 species)
 Family **Sagartiidae** Gosse, 1858 (17 genera, 105 species)
 Family **Sagartiomorphidae** Carlgren, 1934 (1 genus, 1 species)
 incertae sedis (3 genera, 5 species)
 Endomyaria (13 families)
 Family **Actiniidae** Rafinesque, 1815 (55 genera, 328 species)
 Family **Actinodendridae** Haddon, 1898 (3 genera, 9 species)
 Family **Aliciidae** Duerden, 1895 (4 genera, 11 species)
 Family **Capneidae** Gosse, 1860 (2 genera, 6 species)
 Family **Condylanthidae**, Stephenson, 1922 (6 genera, 8 species)
 Family **Homostichanthidae** Carlgren, 1900 (1 genus, 1 species)
 Family **Iosactinidae** Riemann-Zürneck, 1997 (1 genus, 1 species)
 Family **Liponematidae** Hertwig, 1882 (2 genera, 4 species)
 Family **Phymanthidae** Andres, 1883 (2 genera, 13 species)
 Family **Preactinidae** England in England & Robson, 1984 (2 genera, 2 species)
 Family **Ptychodactinidae** Appellöf, 1893 (1 genus, 2 species)
 Family **Stichodactylidae** Andres, 1883 (2 genera, 9 species)
 Family **Thalassianthidae** Milne-Edwards, 1857 (4 genera, 8 species)
 incertae sedis (12 genera, 38 species)
 Mesomyaria (4 families)
 Family **Actinoscyphiidae** Stephenson, 1920 (8 genera, 13 species)
 Family **Actinostolidae** Carlgren, 1893 (19 genera, 68 species)
 Family **Exocoelactiidae** Carlgren, 1925 (1 genus, 2 species)
 Family **Isanthidae** Carlgren, 1938 (6 genera, 9 species)
 Infraorder **Athenaria** Carlgren, 1899 (11 families)
 Family **Andresiidae** Stephenson, 1922 (1 genus, 1 species)

1. **BY** Andrea L. Crowther (for full contact information, see **Author name and address** after **Cited references**). The title of this contribution should be cited as “Class Anthozoa Ehrenberg, 1834. *In*: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness”. Recent Anthozoa includes approximately 2 subclasses, 9 orders, 143 families, 954 genera and 6,142 species
2. Daly *et al.* (2007). Please refer to Daly *et al.* (2007) for a more complete discussion and list of references.
3. Fautin (2011a).
4. Rodríguez *et al.* (2009).
5. Fautin *et al.* (2009) [note: ICZN case 3493 pending to conserve *Haliplanella* Hand, 1953 (Actiniaria) over *Haliplanella* Treadwell, 1943 (Polychaeta). Haliplanellidae has 2 genera, 2 species.]

- Family **Andvakiidae** Danielssen, 1890 (3 genera, 10 species)
- Family **Edwardsiidae** Andres, 1881 (11 genera, 87 species)
- Family **Galatheanthemidae** Carlgren, 1956 (1 genus, 2 species)
- Family **Halcampidae** Andres, 1883 (8 genera, 23 species)
- Family **Halcampoididae** Appellöf, 1896 (8 genera, 14 species)
- Family **Haliactinidae** Carlgren, 1949 (6 genera, 8 species)
- Family **Haloclavidae** Verrill, 1899 (11 genera, 32 species)
- Family **Limnactiniidae** Carlgren, 1921 (1 genus, 2 species)
- Family **Octineonidae** Fowler, 1894 (1 genus, 3 species)
- Family **Polyopidae** Hertwig, 1882 (2 genera, 2 species)
- Suborder **Protantheae** Carlgren, 1899 (1 family)
 - Family **Gonactiniidae** Carlgren, 1893 (2 genera, 2 species)
- incertae sedis* (13 genera, 15 species)
- Order **Antipatharia** Milne-Edwards & Haime, 1857 (7 families)⁶
 - Family **Antipathidae** Ehrenberg, 1834 (8 genera, 141 species)
 - Family **Aphanipathidae** Opresko, 2004 (9 genera, 22 species)
 - Family **Cladopathidae** Kinoshita, 1910 (6 genera, 18 species)
 - Family **Leiopathidae** Haeckel, 1896 (1 genus, 6 species)
 - Family **Myriopathidae** Opresko, 2001 (5 genera, 33 species)
 - Family **Schizopathidae** Brook, 1889 (11 genera, 41 species)
 - Family **Stylopathidae** Opresko, 2006 (3 genera, 9 species)
- Order **Ceriantharia** Perrier, 1883 (2 suborders)⁷
 - Suborder **Penicilaria** Hartog, 1977 (1 family)
 - Family **Arachnanthidae** McMurrich, 1910 (10 genera, 38 species)
 - Suborder **Spirularia** Hartog, 1977 (2 families)
 - Family **Botrucnidiferidae** Carlgren, 1912 (11 genera, 28 species)
 - Family **Cerianthidae** Milne-Edwards & Haime, 1852 (19 genera, 75 species)
- Order **Corallimorpharia** Carlgren, 1940 (4 families)
 - Family **Corallimorphidae** Hertwig, 1882 (2 genera, 22 species)⁸
 - Family **Discosomatidae** Duchassaing & Michelotti, 1864 (4 genera, 20 species)
 - Family **Ricordeidae** Watzl, 1922 (1 genus, 2 species)
 - Family **Sideractiidae** Danielssen, 1890 (2 genera, 2 species)
- Order **Scleractinia** Bourne, 1900 (27 families)⁹
 - Family **Acroporidae** Verrill 1902 (7 genera, 244 species)¹⁰
 - Family **Agariciidae** Gray, 1847 (6 genera, 43 species)
 - Family **Anthemiphylliidae** Vaughan 1907 (1 genus, 7 species)
 - Family **Astrocoeniidae** Koby, 1890 (2 genera, 4 species)
 - Family **Caryophylliidae** Gray, 1846 (43 genera, 294 species)
 - Family **Dendrophylliidae** Gray, 1847 (18 genera, 152 species)
 - Family **Euphyllidae** Veron, 2000 (4 genera, 13 species)
 - Family **Faviidae** Gregory, 1900 (23 genera, 125 species)
 - Family **Flabellidae** Bourne, 1905 (10 genera, 98 species)
 - Family **Fungiacyathidae** Chevalier, 1987 (1 genus, 20 species)
 - Family **Fungiidae** Dana, 1846 (11 genera, 43 species)
 - Family **Gardinieriidae** Stolarski, 1996 (2 genera, 6 species)
 - Family **Guyniidae** Hickson, 1910 (1 genus, 1 species)
 - Family **Meandrinidae** Gray, 1847 (4 genera, 5 species)
 - Family **Merulinidae** Verrill, 1866 (5 genera, 12 species)
 - Family **Micrabaciidae** Vaughan, 1905 (4 genera, 13 species)
 - Family **Mussidae** Ortmann, 1890 (14 genera, 50 species)
 - Family **Oculinidae** Gray, 1847 (6 genera, 14 species)
 - Family **Pectiniidae** Vaughan & Wells, 1943 (6 genera, 28 species)
 - Family **Pocilloporidae** Gray, 1842 (1 genus, 8 species)

6. Opresko (2001, 2002, 2003, 2004, 2006).

7. pers. comm. Tina N. Molodtsova.

8. Fautin (2011b).

9. Cairns *et al.* (1999); Veron (2000a,b,c); Cairns (2009).

10. Wallace (1999); *Isopora* elevated by Wallace *et al.* (2007); *Alveopora* elevated by Dai & Horng (2009); Wallace *et al.* (2011).

- Family **Poritidae** Gray, 1842 (5 genera, 92 species)
 Family **Rhizangiidae** D'Orbigny, 1851 (4 genera, 32 species)
 Family **Schizocyathidae** Stolarski, 2000 (3 genera, 3 species)
 Family **Siderastreidae** Vaughan & Wells, 1943 (6 genera, 28 species)
 Family **Stenocyathidae** Stolarski, 2000 (3 genera, 3 species)
 Family **Trachyphylliidae** Verrill, 1901 (1 genus, 1 species)
 Family **Turbinoliidae** Milne-Edwards & Haime, 1848 (23 genera, 57 species)
- Order **Zoanthidea** (2 suborders)¹¹
- Suborder **Brachycnemina** Haddon and Shackleton, 1891 (3 families)
 Family **Neozoanthidae** Herberts, 1972 (1 genus, 1 species)
 Family **Sphenopidae** Hertwig, 1882 (2 genera, 42 species)
 Family **Zoanthidae** Gray, 1840 (3 genera, 45 species)
- Suborder **Macrocnemina** Haddon & Shackleton, 1891 (4 families)
 Family **Epizoanthidae** Delage & Hérouard, 1901 (1 valid genus, 2 genera inquirenda, 43 valid species, 3 species inquirenda)
 Family **Hydrozoanthidae** Sinniger, Reimer & Pawlowski, 2010 (2 genera, 5 species)¹²
 Family **Microzoanthidae** Fujii & Reimer, 2011 (1 genus, 2 species)¹³
 Family **Parazoanthidae** Delage & Hérouard, 1901 (6 genera, 29 species)¹⁴
incertae sedis (1 family)
 Family **Abyssozoanthidae** Reimer & Fugiwara, 2007 in Reimer *et al.* 2007 (1 genus, 2 species)¹⁵
- Subclass **Octocorallia** (3 orders)¹⁶
- Order **Alcyonacea** Lamouroux, 1816 (31 families)
- Section **Protoalcyonaria** (2 families)
 Family **Haimeidae** Wright, 1865 (2 genera, 2 species)
 Family **Taiaroidae** Bayer & Muzik, 1976 (1 genus, 1 species)
- Section **Alcyoniina** (5 families)
 Family **Alcyoniidae** Lamouroux, 1812 (36 genera, 465 species)
 Family **Nephtheidae** Gray, 1862 (20 genera, ~500 species)
 Family **Nidaliidae** Gray, 1869 (8 genera, 89 species)
 Family **Paralcyoniidae** Gray, 1869 (5 genera, 13 species)
 Family **Xeniidae** Ehrenberg, 1828 (16 genera, 137 species)
- Suborder **Calcaxonia** Grasshoff, 1999 (6 families)
 Family **Chrysogorgiidae** Verrill, 1883 (14 genera, 92 species)
 Family **Dendrobrachiidae** Brook, 1889 (1 genus, 3 species)
 Family **Ellisellidae** Gray, 1859 (10 genera, ~100 species)
 Family **Ifalukellidae** Bayer, 1955 (2 genera, 6 species)
 Family **Isididae** Lamouroux, 1812 (38 genera, 135 species)
 Family **Primnoidae** Milne Edwards, 1857 (37 genera, 210 species)¹⁷
- Suborder **Holaxonia** (5 families)
 Family **Acanthoaxiidae** van Ofwegen & McFadden, 2010 (1 genus, 1 species)¹⁸
 Family **Acanthogorgiidae** Gray, 1859 (5 genera, 110 species)
 Family **Gorgoniidae** Lamouroux, 1812 (15 genera, 260 species)
 Family **Keroeididae** Kinoshita, 1910 (5 genera, 13 species)
 Family **Plexauridae** Gray, 1859 (42 genera, 370 species)
- Suborder **Scleraxonia** Studer, 1887 (7 families)
 Family **Anthothelidae** Broch, 1916 (14 genera, 55 species)
 Family **Briareidae** Gray, 1859 (2 genera, 10 species)
 Family **Coralliidae** Lamouroux, 1812 (3 genera, 30 species)
 Family **Melithaeidae** Gray, 1870 (6 genera, 104 species)
 Family **Paragorgiidae** Kukenthal, 1916 (2 genera, 17 species)

11. pers. comm. James D. Reimer.

12. Sinniger *et al.* (2010); Reimer & Fujii (2010).

13. Fujii & Reimer (2011).

14. Sinniger *et al.* (2010).

15. Reimer *et al.* (2007).

16. Williams & Cairns (2009); pers. comm. Catherine S. McFadden.

17. Carins & Bayer (2009).

18. van Ofwegen & McFadden (2010).

- Family **Parisididae** Aurivillius, 1931 (1 genus, 5 species)
- Family **Subergorgiidae** Gray, 1859 (3 genera, 6 species)
- Section **Stolonifera** Thomson & Simpson, 1909 (6 families)
 - Family **Acrossotidae** Bourne, 1914 (1 genus, 1 species)
 - Family **Clavulariidae** Hickson, 1894 (21 genera, 60 species)
 - Family **Coelogorgiidae** Bourne, 1900 (1 genus, 1 species)
 - Family **Cornulariidae** Dana, 1846 (1 genus, 4 species)
 - Family **Pseudogorgiidae** Utinomi & Harada, 1973 (1 genus, 1 species)
 - Family **Tubiporidae** Ehrenberg, 1828 (1 genus, 1 (or more) species)
- Order **Helioporacea** Bock, 1938 (2 families)¹⁹
 - Family **Helioporidae** Moseley, 1876 (1 genus, 1 species)
 - Family **Lithotelestidae** Bayer & Muzik, 1977 (1 genus, 4 species)
- Order **Pennatulacea** Verrill, 1865 (14 families)²⁰
 - Family **Anthoptilidae** Kölliker, 1880 (1 genus, 2 species)
 - Family **Chunellidae** Kükenthal, 1902 (2 genera, 4 species)
 - Family **Echinoptilidae** Hubrecht, 1885 (2 genera, 7 species)
 - Family **Funiculinidae** Gray, 1870 (1 genus, 3 species)
 - Family **Halopteridae** Williams, 1995 (1 genus, 6 species)
 - Family **Kophobelemnidae** Gray, 1860 (3 genera, 18 species)
 - Family **Pennatulidae** Ehrenberg, 1834 (6 genera, 50 species)
 - Family **Protoptilidae** Kölliker, 1872 (2 genera, 7 species)
 - Family **Renillidae** Gray, 1870 (1 genus, 4 species)
 - Family **Scleroptilidae** Jungersen, 1904 (2 genera, 4 species)
 - Family **Stachyptilidae** Kölliker, 1880 (2 genera, 4 species)
 - Family **Umbellulidae** Kölliker, 1880 (1 genus, 9 species)
 - Family **Veretillidae** Herklots, 1858 (5 genera, 35 species)
 - Family **Virgulariidae** Verrill, 1868 (5 genera, 40 species)

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19. Higher taxa from Bayer (1981).

20. Last revision done by Williams (1995).

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